



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,069	06/11/2001	Mohan Kalkunte	108339-00074	9853

32294 7590 02/01/2005

SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER

SHEW, JOHN

ART UNIT	PAPER NUMBER
----------	--------------

2664

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

04

Office Action Summary	Application No. 09/877,069	Applicant(s) KALKUNTE ET AL.	
	Examiner John L Shew	Art Unit 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/11/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-8, 12 and 14 is/are rejected.
- 7) ☒ Claim(s) 4-6, 9-11, 13 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09072001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings Fig. 45 and Fig. 46 are objected to under 37 CFR 1.83(a) because they fail to show switch numbers SW1 through SW4 as described in the specification.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

1. The disclosure is objected to because of the following informalities:

Page 1 paragraph [0001] cites "Application Serial No. 60/_____, filed on February 22, 2001" requires the entry of the associated application number.

Page 35 paragraph [0137] cites "A-EGRESS flowchart is provided in Fig. A34" should be "A-EGRESS flowchart is provided in Fig. 36".

Page 73 paragraph [0268] cites "higher capacity devices 4301 using a TurboGig" should be "higher capacity devices 4301 using a TurboGig".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 3, 7, 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Salett et al. (Patent number 6490276).

Claim 1, Salett teaches a method of handling data packets in a series of stacked network switches (FIG. 2, Abstract lines 1-5) referenced by a series of stacked network switches 203 205 207 209 211 for providing data frame communications between switches, said method comprising placing incoming packets into an input queue of a first stacked network switch (FIG. 2, column 6 lines 35-38) referenced by Station A sending packets to Network Switch 205 input port 4 with priority queue information, applying the input data packets to an address resolution logic engine (FIG. 2, column 5 lines 45-51) referenced by the Content Addressable Memory 213 performing ARP filtering for the processor port, performing a lookup to determine whether certain packet fields are stored in a lookup table; (FIG. 6, column 5 lines 45-59) referenced by the reading of the packet header and Destination-Address/Source-Address with lookup of the address entries to forwarding/filtering and VLAN masks, determining whether a result of the lookup provides a trunk group ID for a particular data packet of said input data packets (FIG. 6, column 6 lines 28-31) referenced by the Trunk Mask Group in determination of a trunk group, when the lookup provides a trunk group ID: using the trunk group ID to determine an egress port (column 6 lines 28-31) referenced by the activation of multiple trunk ports based on the Trunk Mask Group, determining if the egress port is found on said first stacked network switch (FIG. 2, column 4 lines 33-67, column 5 lines 1-44) referenced by Switch 205 performing a station list lookup in it's

CAM 213 where if the station is found will forward to the associated port, determining if the egress port is found on said first stacked network switch (FIG. 2, column 4 lines 33-55) referenced by the determination whether the station B is found by Switch 205, setting a stacked tag on said particular data packet if the egress port is not found on the first stacked network switch; (column 6 lines 32-34) referenced by the SSA/DSA address tagging for MAC based sniffing to determine their unknown status when the address is not found in the CAM, and forwarding said particular data packet to the egress port (FIG. 2, column 4 lines 56-61) referenced by the flooding the data frame to all ports on Switch 205 when destination station B is not found, and when said lookup does not provide a trunk group ID discarding forwarding or modifying the packet based on the result of the lookup (column 6 lines 50-53) referenced by discard of the receive port unless the override bit is set to force a Destination Address.

Claim 2, Salett teaches said step of using the trunk group ID to determine an egress port comprises using the trunk group ID as an index to perform a lookup on a trunk group table to obtain said egress port (column 6 lines 28-31) referenced by the Trunk Mask Group to build an index to a trunk mask to determine a forwarding mask of multiple trunk ports.

Claim 3, Salett teaches wherein the lookup on the trunk group table results in a rules tag where the rules tag define a criterion to be used to select the egress port (FIG. 6,

column 6 lines 22-24) referenced by the Policy field index to determine Destination Address based policies for forwarding and filtering.

Claim 7, Salett teaches a first stacked network switch for handling data packets configured in connection with a series of stacked network switches (FIG. 2, Abstract lines 1-5) referenced by a series of stacked network switches 203 205 207 209 211 for providing data frame communications between switches with network switch 205 being the first stacked network switch, comprising an input queue for placing incoming packets into (FIG. 2, column 6 lines 35-38) referenced by Station A sending packets to Network Switch 205 input port 4 with priority queue information, an address resolution logic engine (FIG. 2, column 5 lines 45-51) referenced by the Content Addressable Memory 213 performing ARP filtering for the processor port, means for performing a lookup to determine whether certain packet fields are stored in a lookup table (FIG. 2, column 5 lines 45-51) referenced by the Content Addressable Memory 213 performing ARP which looks up MAC address field in an address resolution table, means for determining whether a result of the lookup provides a trunk group ID for a particular data packet of said input data packets (FIG. 6, column 6 lines 28-31) referenced by the Trunk Mask Group in determination of a trunk group, means for determining whether the trunk group ID is found on said first stacked network switch (FIG. 2, column 4 lines 33-67, column 5 lines 1-44) referenced by Switch 205 performing a station list lookup in it's CAM 213 where if the station is found will forward to the associated port wherein the trunk is associated to the egress port, means for setting a stacked tag on said particular

data packet (column 6 lines 32-34) referenced by the SSA/DSA address tagging for MAC based sniffing to determine their unknown status when the address is not found in the CAM, and means for discarding forwarding and modifying the packet (column 6 lines 50-52, lines 25-27, lines 56-58) referenced by the CAM means using the entry table inclusive of the functions of discarding forwarding and modification through filtering, based upon the result of the lookup (column 6 lines 28-31) referenced by the Trunk Group Mask to index the trunk mask for the lookup result of forwarding to multiple trunk ports, wherein if the lookup provides a trunk group ID the means for discarding forwarding and modifying the packet is configured to use the trunk group ID to determine an egress port and forwards said particular data packet to the egress port (FIG. 6, column 6 lines 28-31) referenced by the Trunk Mask Group in determination of a trunk group and by the activation of multiple trunk ports based on the Trunk Mask Group which thereby determines discarding and forwarding of the packet to select ports, and therein the means for setting a stacked tag sets the stacked tag on said particular data packet when the trunk group ID is not found on said first stacked network switch (column 6 lines 32-34) referenced by the SSA/DSA address tagging for MAC based sniffing to determine their unknown status when the address is not found in the CAM.

Claim 8, Salett teaches means for discarding forwarding and modifying the packet (column 6 lines 50-52, lines 25-27, lines 56-58) referenced by the CAM means using the

entry table inclusive of the functions of discarding forwarding and modification through filtering, to use trunk group ID as an index to perform a lookup on a trunk group table to obtain said egress port (column 6 lines 28-31) referenced by the Trunk Group Mask to index the trunk mask for the forwarding to multiple trunk ports.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salett as applied to claims 1, 2, 3, 7, 8 above in view of Bussiere (Patent number 6041042).

Claim 12, Salett teaches a method of handling data packets in a network switch (FIG. 2, Abstract lines 1-5) referenced by a series of stacked network switches 203 205 207 209 211 for providing data frame communications between switches, said method comprising placing incoming packets into an input queue (FIG. 2, column 6 lines 35-38) referenced by Station A sending packets to Network Switch 205 input port 4 with priority queue information, applying the input data packets to an address resolution logic engine

(FIG. 2, column 5 lines 45-51) referenced by the Content Addressable Memory 213 performing ARP filtering for the processor port, performing a lookup to determine whether certain packet fields are stored in a lookup table; (FIG. 6, column 5 lines 45-59) referenced by the reading of the packet header and Destination-Address/Source-Address with lookup of the address entries to forwarding/filtering and VLAN masks, discarding forwarding or modifying the packet based on the result of the lookup (column 6 lines 50-53) referenced by discard of the receive port unless the override bit is set to force a Destination Address. Salett does not teach mirroring ports.

Bussiere teaches resolving mirroring fields of said incoming data packets (FIG. 5b, column 7 lines 50-63) referenced by the fields DA_e Sa_e $Type_e$ which specify the MAC addresses to be resolved for mirroring the data, forwarding said incoming data packets to mirroring ports based on said mirroring field (FIG. 2, column 1 lines 50-53, column 14-20) referenced by the mirror-from-port via the mirror-to-port to the remote analyzer 5 for monitoring based on the MAC address.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the mirroring ports of Bussiere to the stackable switch ports of Salett for the purpose of remote monitoring of data on a communications network.

Claim 14, Salett teaches a network switch for handling data packets in a network switch (FIG. 2, Abstract lines 1-5) referenced by a series of stacked network switches 203 205 207 209 211 for providing data frame communications between switches, said method

comprising an input queue for placing incoming packets into (FIG. 2, column 6 lines 35-38) referenced by Station A sending packets to Network Switch 205 input port 4 with priority queue information, address resolution logic engine (FIG. 2, column 5 lines 45-51) referenced by the Content Addressable Memory 213 performing ARP filtering for the processor port, means for performing a lookup to determine whether certain packet fields are stored in a lookup table; (FIG. 6, column 5 lines 45-59) referenced by the reading of the packet header and Destination-Address/Source-Address with lookup of the address entries to forwarding/filtering and VLAN masks, means for discarding forwarding and modifying the packet based on the result of the lookup (column 6 lines 50-52, lines 25-27, lines 56-58) referenced by the CAM means using the entry table inclusive of the functions of discarding forwarding and modification through filtering. Salett does not teach mirroring ports.

Bussiere teaches means for resolving mirroring fields of said incoming data packets (FIG. 2, FIG. 5b, column 7 lines 50-63) referenced Ingress Device 15 using the fields DA_e Sa_e $Type_e$ which specify the MAC addresses to be resolved for mirroring the data, means for forwarding said incoming data packets to mirroring ports based on said mirroring field (FIG. 2, column 1 lines 50-53, column 14-20) referenced by the mirror-from-port via the mirror-to-port to the remote analyzer 5 for monitoring based on the MAC address.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the mirroring ports of Bussiere to the stackable switch ports of Salett for the purpose of remote monitoring of data on a communications network.

Allowable Subject Matter

4. Claims 4, 5, 6, 9, 10, 11, 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Shew whose telephone number is 571-272-3137. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

js

A handwritten signature in dark ink, consisting of stylized, cursive letters that appear to be 'WMA' followed by a long horizontal stroke.